

B18
--11. (new) The process as claimed in claim 8, wherein the set-back edges are produced by machining the walls of the hollow sections strip(s).

--12. (new) The process as claimed in claim 8, wherein the set-back edges extend over the entire height of the side surfaces of the hollow section strip(s).

--13. (new) The process as claimed in claim 8, wherein the metal comprises aluminum.--

R E M A R K S

The application has been amended so as to place it in condition for allowance at the time of the next Official Action.

The specification has been amended to insert section headings and to eliminate references to claims.

Claims 8-13 are present in the application.

Claims 1-7 have been canceled.

New claims 8-13 have been inserted.

Claims 1-3 and 5-7 were rejected under 35 USC §102(b) as being anticipated by DE 36 34 793 (DE '793). Claims 1-7 were rejected under 35 USC §103(a) as being unpatentable over the admitted prior art in view of DE '793 and any one of EP 0 546

854, EP 0 662 389 or WO 88/06966 optionally further taken with LEMELSON 3,779,446. Applicant respectfully traverses these rejections as applied to new claims 8-13.

New claim 8 incorporates the subject matters of original claims 1, 3 and 7. New dependent claims 9-11 incorporate the subject matter of original claims 5, 6 and 4 respectively. New claims 8-13 are presented in a form more commonly accepted in United States patent practice.

New independent claim 8 recites "joining the ends of hollow metal section strips or the ends of a hollow metal section strip", "producing edges which extend over the width of at least one surface of the ends to be joined to one another" and "the at least one surface comprising the surface which will be the inner surface of the spacer inside the insulating glass".

All of the applied prior art references except LEMELSON describe welding of tubular plastic members in which the tubular members are provided with a chamfer to eliminate the formation of a welding bead.

None of the applied prior art reference describe producing edges over at least one surface of ends of a hollow metal section strip in which "the at least one surface comprising the surface which will be the inner surface of the spacer inside the insulating glass".

In view of the above amendments and remarks, Applicant respectfully submits that the inventive process of claims 8-13 is neither anticipated by nor would have been obvious to one of ordinary skill in the art over the admitted prior art, DE '793, EP '854, EP '393, WO '966, LEMELSON either alone or in any combination thereof.

In light of the above amendments and remarks, Applicant believes that the present application is in condition for allowance and an early indication of the same is respectfully requested.

If the Examiner has any questions or requires clarification of any of the above points, the Examiner may contact the undersigned Agent so that this application may continue to be expeditiously advanced.

Attached hereto is a marked-up version of the changes made to the specification. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

Respectfully submitted,

YOUNG & THOMPSON

By *J. Reed Batten, Jr.*
J. Reed Batten, Jr.
Agent for Applicant
Registration No. 27,099
745 South 23rd Street
Arlington, VA 22202
Telephone: 703/521-2297

November 6, 2002

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Page 1, the paragraph beginning on line 18 has been replaced as follows:

--A device with which this can be done is known from EP 0 192 921 B1 (= US 4 704 512 A). [US 4 704 512 A also discloses a process with the features of the introductory part of claim 1.]--

Page 2, replace the paragraph beginning on line 20 as follows:

--In the inventive process [as claimed in the invention], before the welding process, on the ends of the hollow section strips to be joined to one another (or the ends of a hollow section strip formed into a frame-like spacer) on at least one surface of the hollow section strip edges are produced which are set back relative to the end faces. Therefore when the hollow section strips are joined or the ends of a hollow section strip are joined to one another, on the side on which there were back-set edges, a weld which is visible from the outside is no longer formed.--

Page 2, the paragraph beginning on line 31 has been replaced as follows:

--It is also advantageous in the inventive process [as claimed in the invention] that a coating which is provided anyway on the side of the hollow section strip provided with the setback edge (varnishing or in aluminum hollow section strips a coating produced by anodizing) remains undamaged also in the area of the weld.--

Page 3, the paragraph beginning on line 15 has been replaced as follows:

--Other details, features and advantages of the invention result from the following description of one embodiment of the inventive process [as claimed in the invention] using the drawings.--

Page 3, the paragraph beginning on line 23 has been replaced as follows:

--Figure 2 shows the ends of a hollow section strip prepared for executing the inventive process [as claimed in the invention] in an oblique view, --

Page 3, the paragraph beginning on line 27 has been replaced as follows:

--Figure 3 shows in a lengthwise section the ends of hollow section strips prepared for executing the inventive process [as claimed in the invention],--

Page 4, the paragraph beginning on line 12 has been replaced as follows:

--In the inventive process [as claimed in the invention], the ends of the hollow section strip 1 to be joined to one another, when the ends of the hollow section strip 1 which are bent into a frame-like spacer are to be joined to one another, or the ends of two hollow section strips 1 which are to be joined to one another by welding in order to form a longer hollow section strip, before executing the welding process are each provided with an edge 7 which is set back relative to the end faces 5. These edges 7 are produced at least in the surface 2 which forms the inner surface in the spacer frame. The edges 7 extend over the entire width of the surface 2 of the hollow section strip 1.--

Page 5, the paragraph beginning on line 25 has been replaced as follows:

--Figure 4 shows in a lengthwise section the result of [a] the inventive welding process [as claimed in the invention]

for joining the ends of two hollow section strips 1 (or a hollow section strip 1 in a spacer frame). It can be seen that the edges 7 adjoin one another and that a welding bead is not visible there from the outside.--

Page 5, the paragraph on line 32 has been replaced as follows:

--In principle it is irrelevant for the inventive process [as claimed in the invention] how the edges 7 which are set back over the end faces 5 of the hollow section strips 1 to be joined to one another are made. In addition to the steps 6 shown in Figures 2 and 3 the wall of the hollow section strip 1 which forms the surface 2 can also be provided with a groove 11 (Figure 5).--

Page 5, the paragraph beginning on line 39, bridging page 6, has been replaced as follows:

--For reliable joining of hollow section strips 1 or a hollow section strip 1 bent into a spacer frame using the inventive process [as claimed in the invention] it is advantageous if the end face 5 of the hollow section strip(s) 1 is made narrower in the area of the set-back edges 7, but still remains, so that in the area of the wall which forms the surface 2 reliable joining of the hollow section strip(s) 1 is achieved.--

Page 6, the paragraph beginning on line 14 has been replaced as follows:

--In principle, various measures are conceivable for making the edges which are set back relative to the end faces 5 on the ends of the hollow section strip(s) 1 to be joined to one another. Edges which are formed by steps 6 (Figure 3) or grooves 11 (Figure 5) have proven especially advantageous for the successful execution of the inventive process [as claimed in the invention].--

Page 6, the paragraph beginning on line 22 has been replaced as follows:

--The inventive process [as claimed in the invention] was described above using the example of joining hollow section strips of metal, especially aluminum. Basically the inventive process [as claimed in the invention] can also be used for joining hollow section strips of weldable plastic, especially thermoplastic. When hollow section strips of thermoplastic are joined there will be no "welding bead" either due to the edge which is set back on at least one surface after the welding process in the area of this surface, but this surface will be continuous, therefore flat in the area of this weld as well.--